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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/638,989	08/11/2003	Robert Greenberg	S230-USA	6557		
28284 SECOND SIG	7590 08/20/200 HT MEDICAL PRODU	EXAM	EXAMINER			
12744 SAN FERNANDO ROAD BUILDING 3			DIETRICH,	DIETRICH, JOSEPH M		
			PAPER NUMBER			
		3762				
			MAIL DATE	DELIVERY MODE		
			08/20/2008	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.	Applicant(s)		
10/638,989	GREENBERG ET AL.		
Examiner	Art Unit		
Joseph M. Dietrich	3762		

The MAILING DATE of this communication appears on the cover sheet with the correspondence address

Period fo		ppears on the cover sheet with the correspondence address			
WHIC - Exter after - If NC - Failu Any	CHEVER IS LONGER, FROM THE MAILING issions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory perior re to reply within the set or extended period for reply will, by state				
Status					
	Responsive to communication(s) filed on <u>04</u> This action is FINAL . 2b)⊠ Th	<u>June 2008.</u> is action is non-final.			
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Dispositi	ion of Claims				
5)□ 6)⊠ 7)□	Claim(s) 1-15 is/are pending in the application 4a) Of the above claim(s) is/are withdrough claim(s) is/are allowed. Claim(s) 1-15 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and	rawn from consideration.			
Applicati	ion Papers				
10)🛛	Applicant may not request that any objection to the Replacement drawing sheet(s) including the corresponding to th	ner. a: a)⊠ accepted or b)⊡ objected to by the Examiner. e drawing(s) be held in abeyance. See 37 CFR 1.85(a). ction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). Examiner. Note the attached Office Action or form PTO-152.			
Priority ι	ınder 35 U.S.C. § 119				
a)[nts have been received. Ints have been received in Application No For it is not stage and (PCT Rule 17.2(a)).			
Attachmen					
	e of References Cited (PTO-892)	Interview Summary (PTO-413) Paper No(s)VMail Date.			

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3) X Information Disclosure Statement(s) (PTO/S6/08) Paper No(s)/Mail Date 8/11/03.

5) Notice of Informal Patent Application 6) Other: _____.

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DETAILED ACTION

Election/Restrictions

 Applicant's election without traverse of Group I (claims 1 – 15) in the reply filed on 4 June 2008 is acknowledged.

Claim Objections

The phrase "exposing an electrical conductor" in lines 4 – 5 of claim 1, does not
positively recite the conductor. It is suggested to first positively recite "an electrical
conductor" before reciting the conductor is located in the aperture.

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

 Claims 1 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berrang et al. (U.S. Patent Application Publication 2003/0109903).

Regarding claims 1 - 8 and 12 - 14, Berrang discloses a first insulation layer (e.g. 11 in Fig. 1); a second insulation layer that defines at least one aperture (e.g. 14) exposing an electrical, biocompatible conductor comprised of titanium (e.g., 13 and paragraph 53); said conductor located between the two insulation layers (e.g. Fig. 1); and at least one other polymer layer that is either located between the first insulation layer and the conductor (e.g. 12) or not in between the two insulation layers (e.g. 10); but fails to disclose specifically that the two insulation layers are comprised of polyparaxylylene (and more specifically Parylene) and the other polymer layers are comprised of polyimide. However Berrange teaches that both Parylene and polyimide can be used as biocompatible insulation as set forth in paragraphs 1 and 80. Furthermore both materials are well known in the art as biocompatible insulation. It would have been obvious to modify insulation layers (11 and 14) and polymer layers (10 and 12) as taught by Berrang with Parvlene and polyimide, respectively, since such a modification would provide the predictable results of optimizing the insulation properties of the device surrounding a conductor.

Regarding **claims 9 – 11**, the phrases "suitable for stimulating a nerve," "suitable for sensing a signal from a nerve," and "suitable for detecting or transmitting signals to living tissue" is functional language. The conductor as taught by Berrang is capable of

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performing these functions as it is titanium and allows an electrical current to travel through it.

 Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berrang et al. as applied to claim 14 above, and further in view of Strandberg et al. (U.S. Patent 5,476,496).

Regarding claim 15, Berrang discloses the claimed invention except for titanium nitride. Strandberg teaches that it is known to use titanium nitride as a biocompatible coating as set forth in column 4, lines 35 – 39. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the coating as taught by Berrang with the titanium nitride coating as taught by Strandberg, since such a modification would provide the predictable results of providing a flexible layer around the entire device that is safe and effective for implantation in the body.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph M. Dietrich whose telephone number is (571)270-1895. The examiner can normally be reached on M-F, 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 571-272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. M. D./ Examiner, Art Unit 3762 8/15/08 /Angela D Sykes/ Supervisory Patent Examiner, Art Unit 3762